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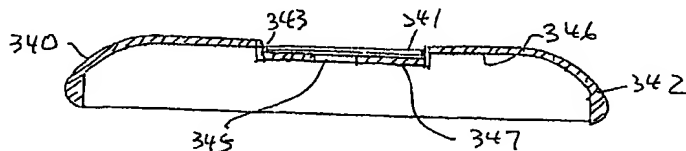
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(54) Title: FLYING DISC WITH COMPACT DISC



(57) Abstract: A flying disc (300) with a disc body (302) and a compact disc (301) on an outer surface or on the surface of a recess in the disc body with an optional securement apparatus (303) on the disc body for releasably securing the compact disc to the disc body; in a preferred embodiment, the flying disc is a first

flying disc (342) adjacent a second flying disc (346) nested within the first flying disc, and the compact disc is disposed between the first flying disc and the second flying disc. In the preferred embodiment the flying disc has at least one opening (343) through the disc body and the compact disc is releasably disposed in the opening, and games and headgear with flying discs.

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## Flying Disc With Compact Disc

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This invention is directed to: flying discs with a compact disc thereon or attached thereto; games with flying discs; headgear with and/or formed of a flying disc; and containers part of which is a flying disc.

The present invention, in certain embodiments, discloses a flying disc with a disc body and a compact disc (CD; computer disc; floppy disc, etc.) on the disc body. Securement apparatus - e.g., but not limited to, tape, adhesive, glue and/or mechanical securement devices - may be used to releasably secure the compact disc to the flying disc. Such a flying disc may have a disc body that has a recess therein for holding the compact or computer disc releasably emplaced in the recess; and in one aspect the recess has a lower wall, and a hole through the lower wall, the hole disposed beneath the computer disc, the hole suitable for insertion of a member therethrough to facilitate ejection of the computer or compact disc ("other disc") from the recess. Any such flying disc may have, according to the present invention, a support member on the disc body for supporting the other disc, the other disc releasably disposed in the support member. In one aspect the support member is a hollow sleeve with two open spaced apart ends or with only one open end and in another aspect the support member is a chamber suitable for housing the other disc, the chamber with a side wall extending down from an underside of the disc body and a bottom wall with an end connected to the side wall. In one such aspect the flying disc has a disc body that has a top side and a bottom side and the support member is on the bottom side. In one aspect a flying disc according to the present invention has at least

one clip on the disc body for releasably holding an item, e.g., but not limited to, a paper, a booklet, and/or compact or computer disc.

Any flying disc as mentioned above may have a disc body that has a recess therein for holding the other disc and the other disc releasably emplaced in the recess; in one aspect with at least one clip on the disc body for releasably holding an item.

Any flying disc according to the present invention may have a disc body as viewed from above, with a shape that is oval, circular, triangular, square, rectangular, pentagonal, hexagonal, septagonal, octagonal, and monagonal.

In certain aspects the present invention discloses headgear that includes a flying disc which, in one aspect, includes a disc body that is wearable on top of a person's head. One such headgear includes a string, band, or piece of elastic for releasably holding the flying disc on a person's head.

The present invention in certain aspects discloses a container that has one part that includes a flying disc. For example, in one embodiment a lid or cover releasably securable over an opening of a hollow container body is a flying disc which is, e.g., held in place by friction fit over or in the hollow body and/or which has a threaded portion that threadedly mates with a corresponding threaded portion of the hollow body.

The present invention also discloses in certain embodiments a variety of games or play activities which may be played with one or more flying discs according to the present invention.

#### DESCRIPTION OF THE DRAWINGS

Fig. 1A is a top view of a flying disc with compact disc according to the present invention. Fig. 1B is a bottom view of the disc of Fig. 1A. Fig. 1C is a side view of the disc of

Fig. 1A. Fig. 1D is a bottom view of a flying disc according to the present invention.

Fig. 2 is a side cross-section view of a flying disc according to the present invention.

Fig. 3A is a side cross-section view of a flying disc according to the present invention. Fig. 3B is a bottom view of the disc of Fig. 3A.

Fig. 4 is a side cross-section view of a flying disc according to the present invention.

Fig. 5 is a side cross-section view of a flying disc according to the present invention.

Fig. 6 is a side cross-section view of a flying disc according to the present invention.

Fig. 7 is a side cross-section view of a flying disc combination according to the present invention.

Fig. 8A is a side view of a flying disc according to the present invention. Fig. 8B - 8E are bottom view of discs as in Fig. 8A.

Fig. 9A is a side cross-section view of a flying disc according to the present invention. Fig. 9B is an exploded view of the disc of Fig. 9A. Fig. 9C is a top view, and Fig. 9D is a bottom view of the disc of Fig. 9A. Fig. 9E shows top views of various embodiments of part of the disc of Fig. 9A. Fig. 9F, 9G and 9H are side cross-section views of a flying disc according to the present invention.

Fig. 10 is a perspective view of a body with garments according to the present invention.

Fig. 11 is a top view of a plurality of flying discs according to the present invention.

Fig. 12 is a side cross-section view of a container according to the present invention.

Fig. 13A is a side cross-section view of a container according to the present invention. Fig. 13B is an exploded view of the container of Fig. 13A.

Fig. 14 and 17 are schematic representations for a game area for a game according to the present invention.

Figs. 15, 18, and 19A are top views and Fig. 19B is a side view of systems according to the present invention.

Figs. 16, 20, and 21 are side cross-section views of systems according to the present invention.

#### DESCRIPTION OF CERTAIN EMBODIMENTS

Figs. 1A - 1C show a flying disc 300 according to the present invention which includes a flying disc body 302 with a top 304 and a bottom 306. Releasably secured to the bottom 306 is a compact disc 301 with tape pieces 303. It is within the scope of this invention to releasably secure the compact disc 301 to the flying disc body 302 with any known tape, adhesive, glue, or suitable releasable securement apparatus or device. Fig. 1D shows another embodiment of the disc 300 with two movable or bendable tabs 307 holding the compact disc 301 in place on the bottom of the flying disc. It is to be understood that the disc body 302 may be any known flying disc, disc, Frisbee (TM) device, and any disc body disclosed herein. Also, the overall shape of the disc (and of any disc or disc body disclosed herein), as viewed from above may be any suitable shape, including, but not limited to, oval, circular, triangular, square, rectangular, pentagonal, hexagonal, septagonal, octagonal, nonagonal, etc.

Fig. 2 shows a flying disc 320 according to the present invention with a disc body 322 and a chamber 324 formed of or secured to a bottom 326 of the disc body 322. The chamber 324 includes a side wall 325 and a lower wall 327 and it houses a compact disc 328 which is removable out through an open end 329. A chamber such as the chamber 324 may, according to the present invention, be provided on any disc body disclosed herein.

Figs. 3A and 3B show a flying disc 330 according to the present invention with a disc body 332 and a sleeve 331

attached to or formed of the disc body 332. A compact disc 333 is releasably held by and within the sleeve 331. A sleeve like the sleeve 331 can, according to the present invention, be provided on any disc body disclosed herein.

Fig. 4 shows a flying disc 340 according to the present invention with a disc body 342 having a bottom 346 and a top 344 with a top recess 343 in which is releasably positioned a compact disc 341. The compact disc 341 may be releasably held in the recess 343 with a friction fit and/or with any suitable tape, adhesive, tab(s), etc.

Fig. 5 shows another embodiment of the disc 340 of Fig. 4 with a hole 345 through a lower wall 347 that defines part of the recess 343. A finger or suitable object may be thrust through the hole 345 to facilitate removal of the compact disc 341 from the recess 343. A recess like the recess 343 and/or with a hole like the hole 345 may be provided on any disc body disclosed herein.

Fig. 6 shows a flying disc 350 according to the present invention with a disc body 352 and a recess 353 (like the recess 343) with a lower wall 357 (like the lower wall 347). A manipulable or bendable clip 359 releasably holds a paper booklet 355 on a lower surface of the wall 357. A compact disc 351 resides releasably within the recess 353. Alternatively, the clip 359 may hold a compact disc instead of or in addition to the booklet 355 and, in one such aspect, the recess 353 is deleted. Alternatively, two or more clips 359 may be used. Alternatively one, two or more clips 359 are positioned on top of the disc body 352 instead of or in addition to the one or more clips 359 on the bottom of the disc body. It is within the scope of this invention to provide one, two, three or more clips 359 on any disc body disclosed herein.

Fig. 7 shows an object containing nesting combination of two flying discs, 360 and 361 (with disc bodies like the body

332, e.g.). The two discs are, in one aspect, releasably held together by a friction fit between the disc's lower edges 362, 363 respectively. An object, e.g. but not limited to a paper, a booklet, and/or a compact disc 365, is held between a lower surface 366 of the disc 360 and an upper surface 367 of the disc 361. It is within the scope of this invention to emplace any suitable object between the two discs. It is within the scope of this invention to nest together any desired number of flying discs, e.g. one, two, three, four, five or more. It is within the scope of this invention to nest together any discs of any shape disclosed herein which have a nestable shape.

Figs. 8A and 8B show a flying disc 370 according to the present invention which, as shown in Fig. 8B, bears the numeral "10" on its underside. Figs. 8C - 8E show additional discs 371 - 373 like the disc 370, but with different numerals. A plurality of discs such as those disclosed in Figs. 8B - 8E may be used, in one aspect according to the present invention, in a game in which one, two, or more persons (or a throwing apparatus) throw the discs at, (either simultaneously, randomly, or sequentially) to, or near one, two, three, four or more persons (players). The person or persons at whom the discs are thrown score points equal to the numeral on a disc they catch and/or for a disc they retrieve and/or acquire whether they catch it in the air or not. A game can be won in several ways: a player catches, retrieves, and/or acquires a sufficient number of discs to accumulate a pre-set point total; a player catches, acquires, and/or retrieves a disc with each different numeral; a player catches/retrieves a set number of discs whose point values are in sequence; and/or a player catches, acquires, and/or retrieves a set number or a particular set of discs which then qualifies the player to proceed from the area to which the discs are being thrown to a pre-set base or goal, and

whichever player first achieves the base or goal is the winner. Alternatively, the players not only get points for disc catching acquisition and/or retrieval, they also earn points by then themselves throwing the discs at or into certain containers, goals, bases, or targets and score more points for their accuracy in such throwing. Any suitable scoring indicia may be used on the discs and any disc disclosed herein may have the indicia for use in a game according to the present invention. It is also within the scope of the present invention for players to be associated in teams for any game according to the present invention.

Figs. 9A - 9D show a flying disc 380 according to the present invention with a disc body 382 having a top 384 and a bottom 386. An amount 381 of releasably-cooperating or hook-and-loop fastener material is on the bottom 386 of the disc 380. Releasably secured to the material 381 is a patch 385 (e.g. of cloth, plastic cardboard paper, or other suitable material) 385 which has on its upper surface a corresponding amount of releasably cooperating or hook-and-loop fastener material 383 [including, but not limited to, VELCRO (TM) material]. As shown in Fig. 9D, the patch 385 has the numeral "20" on it. Fig. 9E illustrates a plurality of patches 388, 389 (like the patch 385) and 385 with different numerals on them. Patches shown have a generally circular shape, but may be any desirable shape.

A plurality of discs like the disc 380 with patches like the patch 385 may be used in any of the methods or games described herein.

Fig. 10 illustrates garments 390, 391 392 worn by a person 393, each garment having an amount of releasably-cooperating fastener material 394, 395, 396 respectively (like the material 381). In one particular activity or game according to the present invention, the person 393 upon catching acquiring and/or retrieving a disc like the disc 380,



removes the patch 385 and releasably attaches it to one of the amounts of material 394, 395, 396. In one aspect another player may attempt to remove this patch to deny the person 393 of points associated with catching/retrieval of the disc that held the patch; the player taking the patch from the person 393 may be awarded those points himself or herself. Although specific garments are shown in Fig. 10, it is within the scope of this invention to provide material like the material 381 on any part of any garment, band or item of clothing or apparel (e.g. headband, wristband, ankleband, belt, hat strap and/or shoe). Any disc, any patch, and any item of clothing or garment may have a battery-powered light, a "light stick," and/or fluorescent material thereon in any form to facilitate use of them in the dark. Material 381 and/or a patch like the patch 385 may be provided on any disc or disc body disclosed herein. It is within the scope of this invention for any patch like a patch 385 to be releasably held in place with suitable tape and/or glue. During a game or activity with one or more discs, each disc with one or more removable patches, a player may as appropriate during the game or activity, switch patches on discs and/or switch a patch from a garment to a disc prior to throwing the disc.

Fig. 9F illustrates a flying disc 400 according to the present invention which may be used with or without a patch like the patch 385. The flying disc 400 has a disc body 402 (like the body 382) with an amount 404 of releasably-cooperating fastener material on top of the disc. The disc 404 has indicia 405 thereon (which as with any indicia herein for any disc herein may be anywhere on the disc or disc body) which may be used for point scoring as in the games and activities described herein. The disc 400 itself may be releasably secured to an amount of material (like the material 383) on a garment, etc., as to the material amounts 394 - 396 of the garments 390 - 392 respectively (Fig. 10). Any flying

disc or disc body disclosed herein may have an amount of material like the material 404, the amount of material may be located anywhere on the disc or disc body, and two, three or more of such amounts of material may be used (in one aspect at least one such amount for each disc required to win the game).

Fig. 9G shows a flying disc 410 with a disc body 412 (like the body 382) and a flotation member 414 secured to or formed of the body 412 that provides sufficient buoyancy to float the disc 410 when it is in water. Such a flotation member 414 may be made of any suitable buoyant material; may be hollow solid or hollow; and may be provided (with or without one or more air chambers 433 described below) on any flying disc or disc body disclosed herein. Thus, any game or activity according to the present invention with one or more flying discs according to the present invention may be conducted in a pool, lake, river, creek, stream, or in the surf.

Fig. 9H shows a flying disc 430 according to the present invention with one or more (as shown) air chambers 433 in a disc body 432 (like the body 382) that are large enough to provide sufficient buoyancy to float the disc 430 when it is in water. Such chamber(s) may be provided for any disc or disc body disclosed herein.

Fig. 11 illustrates a plurality of flying discs 440 many of which have a specific identifying indicia 441 (triangle, square, hexagon or question mark) and some of, optionally, are "dummy" discs with no identifying indicia. Any indicia disclosed herein may be used anywhere on the disc bodies. Any game or activity disclosed herein may be played with the discs 440. In one aspect, one or more persons (individuals or on a team) throw the discs 440 (simultaneously, sequentially or randomly) to one or more persons (individuals or on a team). In one aspect a player wins by catching and/or retrieving a set of the discs, i.e., one disc with each different indicia

and/or all discs with one particular indicia, e.g. all discs with triangle indicia. A player retrieving a disc that does not help that player achieve a desired set throws that disc away, in one aspect anywhere in a pre-agreed area or field of play, for other players to retrieve. Any particular indicia, e.g. those discs with a question mark indicia, may, optionally, be a "wild card" disc that may be used as a disc of any desired indicia to complete a desired set. Once a set is achieved a play wins; or, as described above for other games and activities, a player who accumulates a desired set may, to win, be required to get to a base, goal, etc. The dummy discs may be used as useless decoys of no point or set value. Such dummy discs (one or more) may be provided for any game or activity disclosed herein. The indicia may be provided on patches by providing the discs with one or more removable patches as described above.

Fig. 12 shows a container 450 according to the present invention with a hollow container body 451 and a flying disc 454 with a disc body 452 (like the body 382, e.g.) as the removable lid. The lid-flying disc 454 is held in place on a top edge 455 of the container body 451 by a friction fit. The disc body 452 and the container body 451 may be any suitable dimensions for containing a desired item.

Figs. 13A and 13B show a container 460 according to the present invention with a hollow container body 461 (like the container body 451) and a flying disc 464 with a disc body 462 (like the body 382) as the removable lid. The lid-flying disc 464 has an inner edge 4463 with threads 465 therearound. An edge 468 of the hollow container body 461 has threads 469 therearound for threaded mating of the flying disc 464 and the container body 461 (as shown in Fig. 13A). It is within the scope of this invention for the hollow container bodies in Figs. 12 and 13A to have open bottom ends closed off by another flying disc releasably secured over the bottom

opening. It is within the scope of this invention for any suitable disc disclosed herein to be used as the lid for the containers of Figs. 12 and 13A.

Any flying disc described above for holding a compact disc may employ the know prior art "push button" structure for releasably securing a compact disc to a flying disc. Any compact disc, patch, buoyancy member, paper booklet, and/or clip disclosed herein may be located on any location on a disc body, including, but not limited to, as centrally shown herein. In one aspect a non-central location imparts a desired imbalance to a disc so it will fly more erratically and unpredictably.

In any game or activity described herein in which a group of players or team accumulates a pre-determined score and/or a pre-determined number of discs or indicia-bearing members and/or a pre-determined set of discs or indicia-bearing members, the team can choose, in certain aspects, one player (or some designated players) to hold the discs or indicia-bearing members as they are accumulated during the game or activity (or to have these items releasably attached to the designated player's clothing, garment, belt, hat, strap, shoe, band, or apparel, etc). The identity of the designated player ( or in one aspect two or more designated players) may be revealed at the start of the game or at some pre-set point during the game. Alternatively, the identity of the player(s) may be kept secret until the pre-determined score, number of indicia-bearing members, or set is achieved; or until the player(s) attempt to move to a pre-determined base, goal, or target to "win" the game or activity. In one aspect a player or players may, in any such game or activity according to the present invention, attempt to take from an opposing player (who has qualified to move to a base, goal or target) a disc or discs or an indicia-bearing member so that player no longer is qualified to advance to the base, goal or target.

In any game or activity according to the present invention a pre-determined time limit may be imposed on a player or players for achieving a pre-determined score and/or for retrieving a pre-determined disc or plurality of discs.

Any patch or other indicia-bearing member disclosed herein may be releasably attached to a flying disc with well-known snap apparatus or with the well-known press-fit pop-free apparatus used to releasably attach plastic "flags" to belts used in flag football. In one particular aspect a flying disc itself has the press-fit pop-free apparatus and the disc itself, once retrieved, is releasably attached to a belt or garment with corresponding apparatus (e.g. but not limited to the well-known flag football belt with corresponding apparatus).

In any game or activity according to the present invention in which a score is accorded a person or team for retrieving a disc, a higher score may be awarded for retrieving a disc in flight as opposed to a disc which has touched the ground or water.

Any compact or any flying disc according to the present invention may include on the compact disc instructions and/or rules for any game or activity according to the present invention, information for contacting the source of the game, activity, and/or disc; and/or a computerized version of any game or activity according to the present invention.

Fig. 14 shows schematically an area AR into which or onto which one or more flying discs are to be thrown to score. Such an area AR may have one or more specific areas AA for enhanced scoring as compared to area AR; or a score may be possible only for a flying disc landing in area (or areas) AA. The areas AR and/or AA may also have targets or containers therein for scoring or for enhanced scoring; for example, but without limitation, an area AR has three areas AA, each with a container and the three containers are marked "10", "20",

and "30" respectively. A person or team that throws a plurality of flying discs, each with a specific numerical value on the disc, lands a disc marked "10" in the container marked "20" for a score of  $10 \times 20$  or 200 and a disc marked "50" in the container marked "30" for a score of  $50 \times 30 = 1500$  and a total score of 1700.

Any game played in an area as in Fig. 14 can be played with an offense seeking to score and a defense attempting to prevent the offense from scoring. In certain aspects the defense is limited in position and cannot be in the areas AA and/or cannot be within a certain distance of a target, container, etc. Such a game, with or without a defense, may, in certain aspects, be played in a gymnasium, in a stadium, or in or around a swimming pool. In another aspect two players or teams situated around a gym, field, or pool simultaneously throw one or a plurality of flying discs in an attempt to score. In one particular such game according to the present invention, a class of forty students is divided into two twenty person teams and each person is given a flying disc. Color, numerals, letters or other identifying indicia distinguishes one team's flying discs from the other's. Each team enters an area or stands on opposite sides of a scoring area, e.g. but not limited to a designated area on the gym floor. On a given signal all players throw their discs. Total score is based on a team's discs landing in the scoring area. In one aspect, no disc throwing is permitted when a certain time interval has expired. In another aspect instead of a gymnasium such an activity is conducted indoors or outdoors around a track, a football field or swimming pool. with a swimming pool one or more movable targets, containers, or scoring areas may be used in or on the water. In non-pool situations a moving target, etc. (or plurality thereof) may be provided by placing a target, etc. on a wheeled apparatus.

In another embodiment of an activity according to the

present invention one or more discs (any disclosed herein) are used to hit scoring areas on a panel or wall. Scores may be tabulated manually or the scoring areas may have mechanical or electronic sensors and indicators for signalling and indicating a score. Audio and/or visual signals and/or indicators may be used.

The present invention also discloses various solitaire games in which a plurality of flying discs according to the present invention, any disclosed herein, are thrown by a single person at a target, container, scoring area, goal etc. to achieve a particular total score, or to hit a certain number of targets etc., or targets, etc. in a predetermined series.

Fig. 15 shows a flying disc structure 500 which has a removable portion 502. Upon removal of the removable portion 502, a hole 503 that remains is sized so that the flying disc structure 500 can be worn as a hat, sunvisor, or headgear. The removable portion 502, optionally, may also be configured as a flying disc. The flying disc structure 500 may be shaped and fashioned like any disclosed herein. Optionally the removable portion 502 is shaped as a flying disc and the remainder of the structure 500 is not. Any suitable tie string or elastic band may be used to hold the disc structure 500 on a wearer's head.

Fig. 16 shows a headgear 510 according to the present invention which has a top part 512 which is a flying disc (e.g., but not limited to, like that of Fig. 9A) which has an amount of releasable cooperating fastener material 514 to which is connected an elastic member 516 which has an amount 518 of releasably cooperating fastener material mating with the amount 514. The elastic member 516 releasably holds the headgear 510 on a person's head by emplacing the elastic member around a person's head with part under the person's chin.

Any container or other structure used in any activity, game, or competition according to the present invention may have one or more openings therein or therethrough through which a flying disc is to be thrown for scoring purposes. In other aspects, one or more discs situated in or on a target, area, container, etc. may not be retrieved and subsequently thrown until a certain score is achieved at the initial target, etc.

Fig. 17 illustrates schematically a game area GA for a game or activity according to the present invention in which one or more throwers TH throw a disc or discs (with any indent flying and/or scoring indicia thereon as disclosed herein) to a catcher or catchers CA. One or more defenders DF attempt to prevent the catchers CA from catching the thrown discs. In one aspect points or scores are achieved only when a disc is caught before it hits the ground or water surface of the area GA.

Any disc disclosed herein may have one or more off-center member(s) whose weight causes the disc to fly in an erratic and/or non-straight path.

In another embodiment a flying disc 520 as shown in Fig. 18 has one or a plurality of smaller flying discs 521 - 526 which are releasably held in corresponding holes or recesses 531 - 536 in or through the flying disc 520. In one aspect, the flying disc 520 with the smaller discs 521 - 526 is made as an integral structure from which the smaller discs may be popped-out or removed. Appropriate openings, recesses, and/or thin parts are provided around the discs 521 - 526 to make them easily removable from the disc 520. (Such structure is also used to make the portion 502 removable from the disc structure 500 in Fig. 6.) Alternatively a lip on a small disc 521 - 526 may be releasably held in a corresponding groove of the disc 520; or the smaller discs 521 - 526 are held on corresponding holes by a friction fit.



Figs. 19A, 19B disclose a flying disc system 530 according to the present invention which has a flying disc 532 which is initially held releasably in a hole or recess 538 in an outer flying disc 531. A plurality of smaller flying discs 533 - 537 are releasably held in corresponding holes 539 in the disc 532. Any of the discs 521 - 526 (Fig. 18) or the discs 532 - 537 may be a compact disc, CD, or other computer disc. In one aspect the discs 533 - 537 are thrown at the hole or recess 538 to score. As shown in Fig. 19 the disc 531 may have a slot or holding structure 540 into which the disc 532 (or some other member) is insertable to stand the disc 531 upright to present a target at which the discs 533 - 537 may be thrown. A score is also possible, in certain aspects, if the disc 531 is knocked over. The discs in Figs. 18 and 19A may have any identifying and/or scoring indicia disclosed for any disc herein.

Fig. 44 shows a flying disc 560 with a CD 561 attached thereto. The CD 561 may be attached by any suitable tape, adhesive or glue, securement apparatus disclosed herein, or it may be shrink-wrapped on the disc 560. Although the CD is shown on the top of the disc 560, it may be on the underside thereof.

Fig. 45 shows a flying disc 570. Attached thereto is a CD 572 which is shrink-wrapped to (or otherwise attached and/or connected to) a cardboard piece 573 (or other suitable support, e.g., of kraft paper, plastic sheet, etc.). This combination of a CD and piece of cardboard is then attached to the disc 570 by any suitable tape, adhesive or glue, securement apparatus disclosed herein, or the combination itself may be shrink-wrapped on the disc 570. Although the combination CD/cardboard-piece is shown on the underside of the disc 570, it may be on the top side. It is within the scope of this invention to thus combine a CD and any flying disc disclosed herein.

Any game or competition described above may, according to the present invention, be played or competed in with a barrier, wall or net that separates either: a throwing area from which flying disc(s) are thrown and a receiving area or scoring area to which the discs are thrown; or two competitor or team areas one on each side of the net. Such a net includes, but is not limited to, a net as used in volleyball, tennis, badminton and ping-pong and such a game or competition may be played on a traditional court or table associated with each of these nets or games or on a basketball court. In certain aspects a disc receiving area on one side of a wall, barrier or net (within a structure or outdoors) may be divided into two, three, four, five, six or more scoring areas each associated with scoring a particular numerical score, providing a multiplier for multiplying a numerical score indicated on a flying disc landing in the area, and/or with scoring a hit for landing in that particular area. A wall, barrier, or net as described above may be over or across a swimming pool or part of a pool or over or across a body of water or part thereof. The wall, barrier or net may be any desired height above the ground or above water and provision may be made of a space between a lower edge of the wall, barrier or net and a top surface of the ground or water. In certain aspects throwing a disc through such a space disqualifies the disc and in other aspects a thus thrown disc scores either points or for traversing that space. the flying discs used for such games and activities (as is true of any disc herein) may be sized as desired. In one aspect relatively small discs (e.g. between 1 to 5 inches in diameter) would be used in playing with a net on a ping pong table.

In certain particular aspects of any game or activity according to the present invention, a catching apparatus or obstruction apparatus may be used by a defensive person to

thwart the efforts of a person or persons throwing one or more discs at a target, etc. and/or to score points or hits in any way disclosed herein. In one particular aspect the catching apparatus has an amount of releasably cooperating fastener material (e.g. but not limited to known hook-and-loop materials and Velcro material) which can mate with and thereby catch and hold a flying disc that has a corresponding amount of such releasably cooperating fastener material. Points or other types of a score can be scored for catching such a disc with such a catching apparatus. Such a catching apparatus may, according to the present invention, be (but is not limited to) a glove, racquet, cesta, stick, panel, piece of rigid material, or another flying disc. Alternatively, a defender may use a net such as those used to catch butterflies and insects or to land a fish to thwart a thrown disc and/or to score by netting it. In another aspect a water gun, water pistol, or any water jetting apparatus may be used by a defender (in any game, competition or activity disclosed herein) to prevent a thrown flying disc from hitting a target, etc. or landing in a desired scoring area.

Any game, activity, or competition according to the present invention that requires throwing a disc to hit a particular target, etc. or land on a particular area may be played on a traditional soccer field, basket ball court, football field, etc., with the soccer goals, baskets, uprights, etc. serving as a target or disc landing areas for scoring purposes. In certain activities according to the present invention, e.g. those played on a soccer field, football field or basketball court, one player of group of players defends and tries to prevent another player or group of players from scoring, e.g. but not limited to, by throwing a flying disc or plurality of discs into a soccer goal, between football field uprights, or through a basketball net. In one aspect of such an activity a team or player to win

throws a certain number of discs or accumulates a certain total score based on scoring indicia on discs; or in one aspect each of a plurality of players throws a flying disc to score in order for the team to win.

Any game, competition, or activity according to the present invention may be timed or certain individual scoring attempts or series of scoring attempts may be tried with no scoring permitted when time is up. Alternatively in certain aspects a person is timed in scoring a certain number of points or a certain type and/or number of scoring events and the player who achieves a predetermined score wins.

The present application discloses, therefore, in at least certain, but not necessarily all, embodiments a flying disc with a disc body and a compact disc on or in the disc body. Such a flying disc may have one or some (in any possible combination) of the following: securement apparatus on the disc body for releasably securing the computer disc to the disc body, the computer disc releasably secured to the disc body by the securement apparatus; wherein the disc body has a recess therein for holding the compact disc which is releasably emplaced in the recess; the recess having a lower wall, and a hole through the lower wall, the hole disposed beneath the computer disc, the hole suitable for insertion of a member therethrough to facilitate ejection of the compact disc from the recess; a support member on the disc body for supporting the compact disc, the compact disc releasably disposed in the support member; at least one clip on the disc body for releasably holding an item. e.g., but not limited to, the compact disc and/or a paper booklet or ad material; and/or wherein the disc body as viewed from above, has a shape from the group consisting of oval, circular, triangular, square, rectangular, pentagonal, hexagonal, septagonal, octagonal, and nonagonal.

The present application discloses, therefore, in at least

certain, but not necessarily all, embodiments a flying disc system with a first disc body, the first disc body comprising a first flying disc, at least one first opening through the first disc body, at least one second disc body, the at least one second disc body releasably disposed in the at least one first opening. Such a flying disc may have one or some (in any possible combination) of the following: wherein the at least one second disc body comprises a second flying disc; wherein the at least one second disc body is a compact disc; wherein the at least one first opening is a plurality of spaced-apart first openings, and the at least one second disc body is a plurality of second disc bodies, one second disc body in each of the first openings of the plurality of spaced-apart openings; wherein each second disc body has identifying indicia thereon; at least one secondary opening through the at least one second disc body, and at least one secondary disc body releasably disposed in the at least one secondary disc opening; reception apparatus on the first disc body for receiving and releasably holding a support device for supporting the first disc body in an upright position; wherein the support device is the at least second disc body and part of the at least one second disc body is releasably held in the reception apparatus; wherein the at least one secondary disc body is a secondary flying disc; wherein the at least one secondary disc body has identifying indicia thereon; and/or wherein the at least one secondary disc body is a plurality of secondary disc bodies and each said secondary disc body is a flying disc.

The present application discloses, therefore, in at least certain, but not necessarily all, embodiments a flying disc system a first flying disc, a second flying disc nested within the first flying disc, and a compact disc disposed between the first flying disc and the second flying disc.

The present application claims priority from U.S.

Applications Ser. Nos. 09/592,976 filed on 6/12/00 and 09/863,634 filed on 5/23/01 which are both incorporated herein in their entirety for all purposes.

## CLAIMS:

1. A flying disc comprising  
a disc body and  
a compact disc on the disc body.
2. The flying disc of claim 1 further comprising  
securement apparatus on the disc body for  
releasably securing the compact disc to the disc body,  
the compact disc releasably secured to the disc  
body by the securement apparatus.
3. The flying disc of claim 1 wherein the disc body has  
a recess therein for holding the compact disc which is  
releasably emplaced in the recess.
4. The flying disc of claim 3 further comprising  
the recess having a lower wall, and  
a hole through the lower wall, the hole  
disposed beneath the computer disc, the hole suitable for  
insertion of a member therethrough to facilitate ejection  
of the compact disc from the recess.
5. The flying disc of claim 1 further comprising  
a support member on the disc body for  
supporting the compact disc,  
the compact disc releasably disposed in the  
support member.
6. The flying disc of claim 1 further comprising  
at least one clip on the disc body for  
releasably holding an item.
7. The flying disc of claim 6 wherein the item is the  
compact disc.
8. The flying disc of claim 1 wherein the disc body as  
viewed from above, has a shape from the group consisting of  
oval, circular, triangular, square, rectangular, pentagonal,  
hexagonal, septagonal, octagonal, and monagonal.
9. A flying disc system comprising  
a first disc body, the first disc body

comprising a first flying disc,  
at least one first opening through the first  
disc body,  
at least one second disc body,  
the at least one second disc body releasably  
disposed in the at least one first opening.

10. The flying disc system of claim 9 wherein the at  
least one second disc body comprises a second flying disc.

11. The flying disc system of claim 9 wherein the at  
least one second disc body is a compact disc.

12. The flying disc system of claim 9 wherein the at  
least one first opening is a plurality of spaced-apart first  
openings, and

the at least one second disc body is a  
plurality of second disc bodies, one second disc body in  
each of the first openings of the plurality of spaced-  
apart openings.

13. The flying disc system of claim 12 wherein each  
second disc body has identifying indicia thereon.

14. The flying disc system of claim 9 further comprising  
at least one secondary opening through the at  
least one second disc body, and

at least one secondary disc body releasably  
disposed in the at least one secondary disc opening.

15. The flying disc system of claim 9 further comprising  
reception apparatus on the first disc body for  
receiving and releasably holding a support device for  
supporting the first disc body in an upright position.

16. The flying disc system of claim 15 wherein the  
support device is the at least second disc body and part of  
the at least one second disc body is releasably held in the  
reception apparatus.

17. The flying disc system of claim 14 wherein the at  
least one secondary disc body is a secondary flying disc.



18. The flying disc system of claim 14 wherein the at least one secondary disc body has identifying indicia thereon.

19. The flying disc system of claim 14 wherein the at least one secondary disc body is a plurality of secondary disc bodies and each said secondary disc body is a flying disc.

20. A flying disc system comprising

a first flying disc,

a second flying disc nested within the first flying disc, and

a compact disc disposed between the first flying disc and the second flying disc.

21. Any game or headgear disclosed herein.

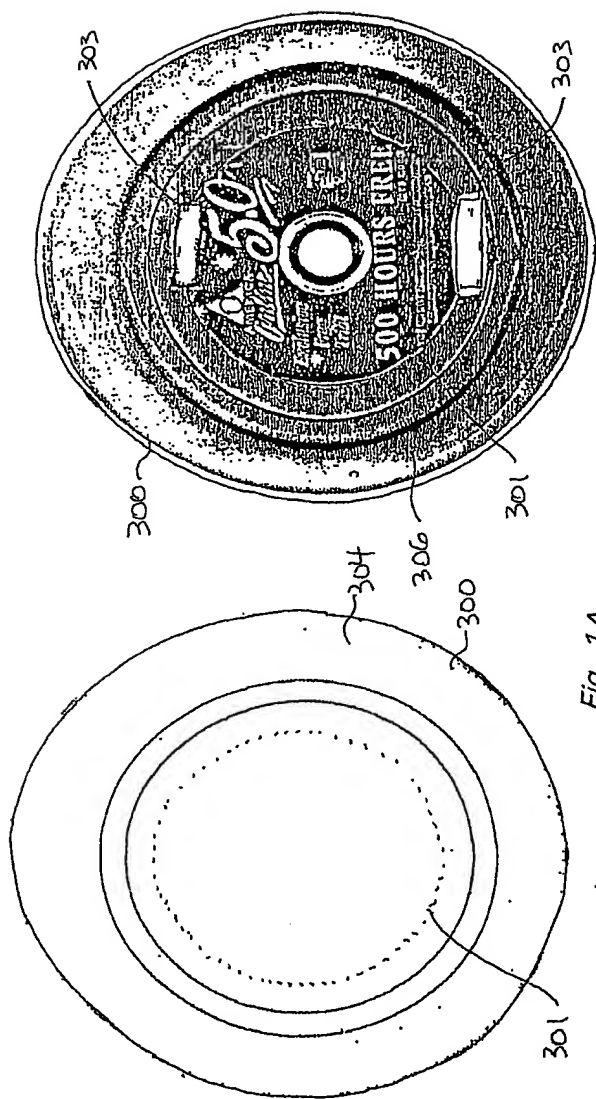
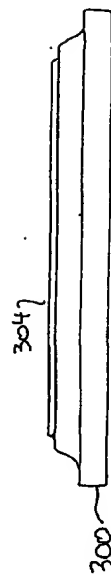
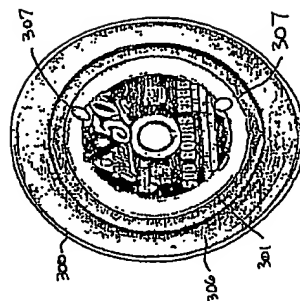
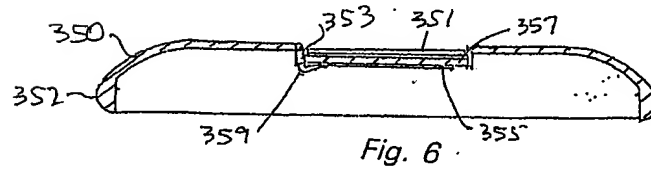
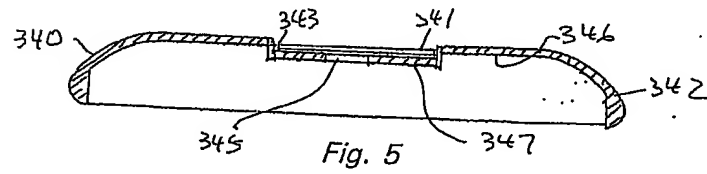
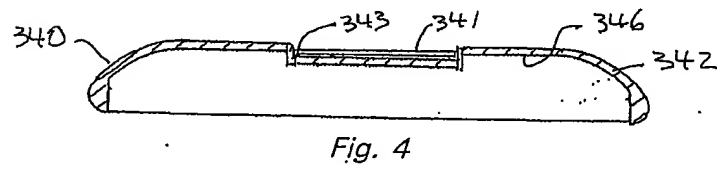
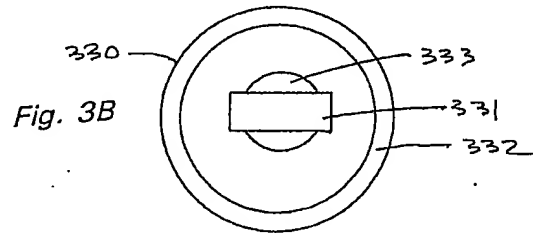
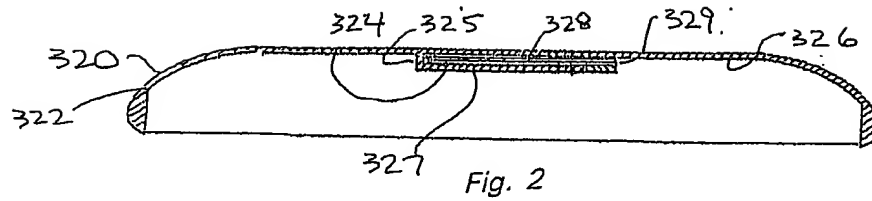


Fig. 1B





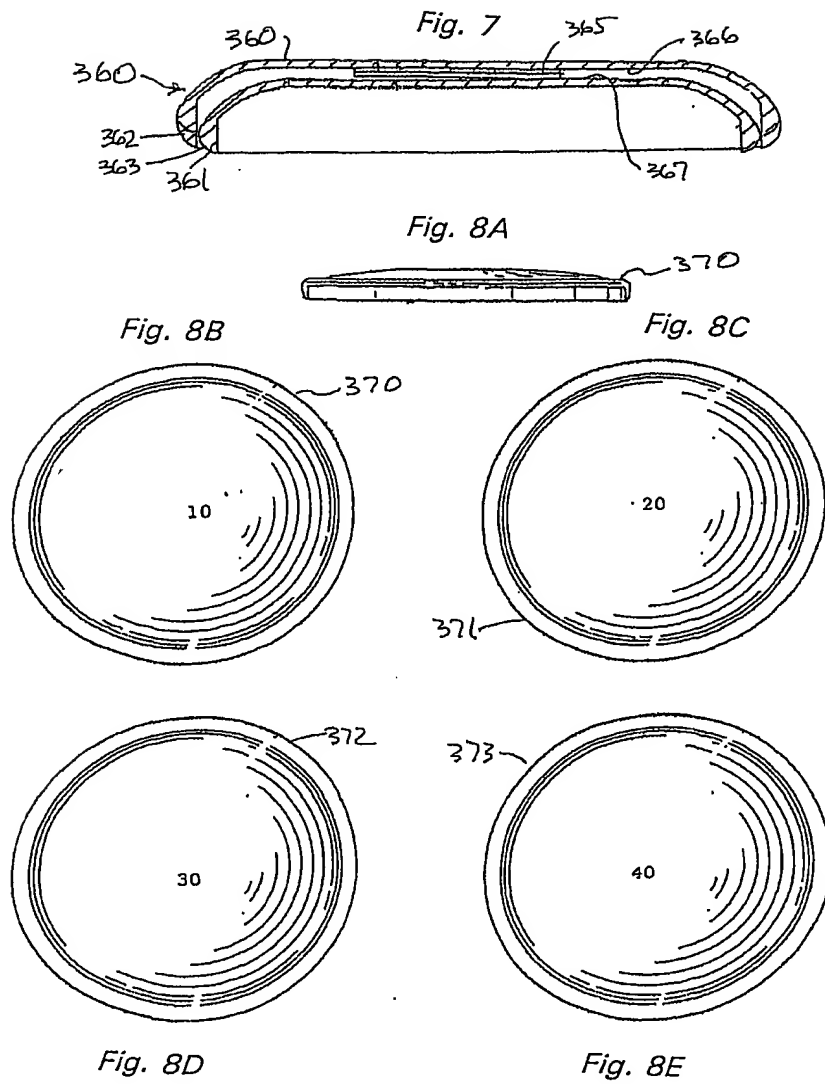


Fig. 9A

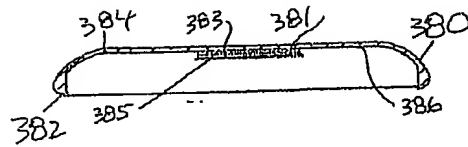


Fig. 9B

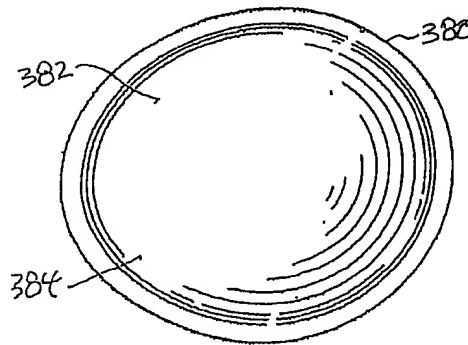
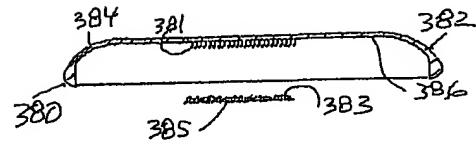


Fig. 9C

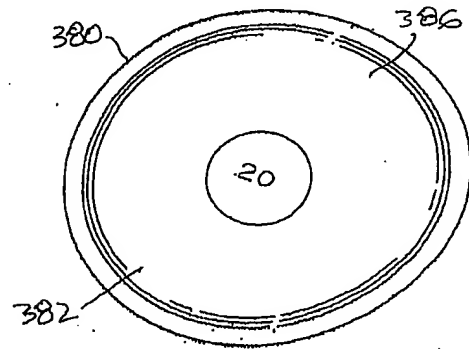


Fig. 9D

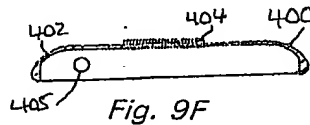
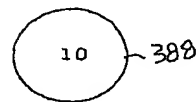


Fig. 9F

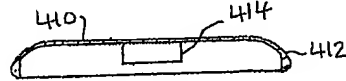
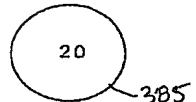


Fig. 9G

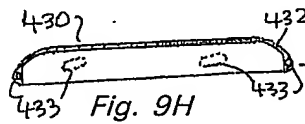
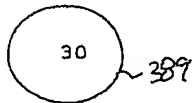


Fig. 9H

Fig. 9E

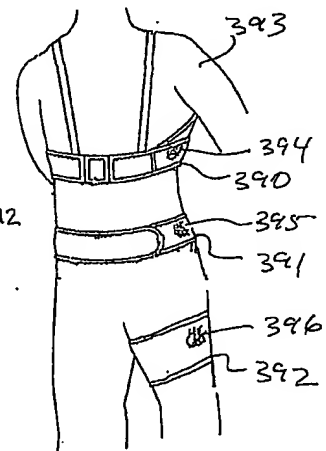


Fig. 10

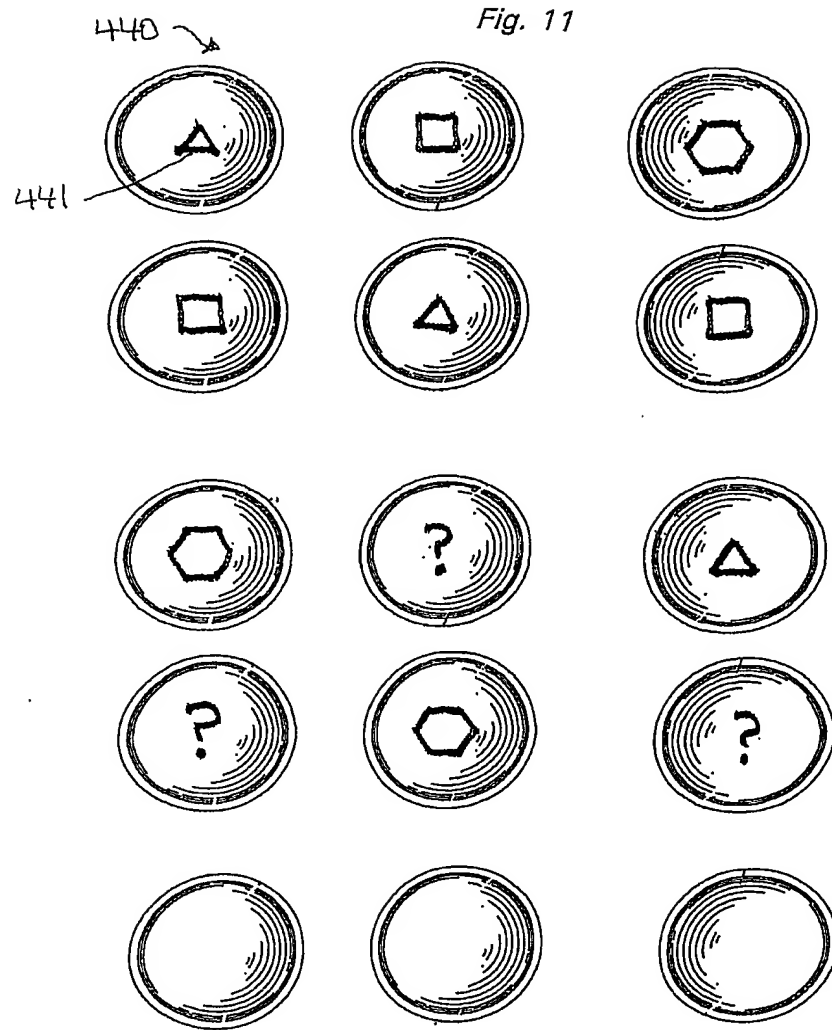


Fig. 12

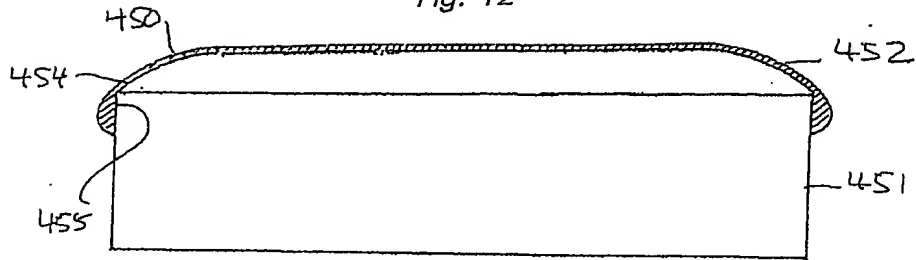


Fig. 13A

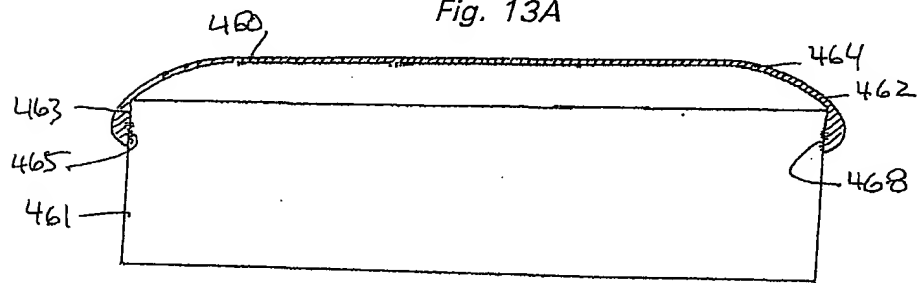


Fig. 13B

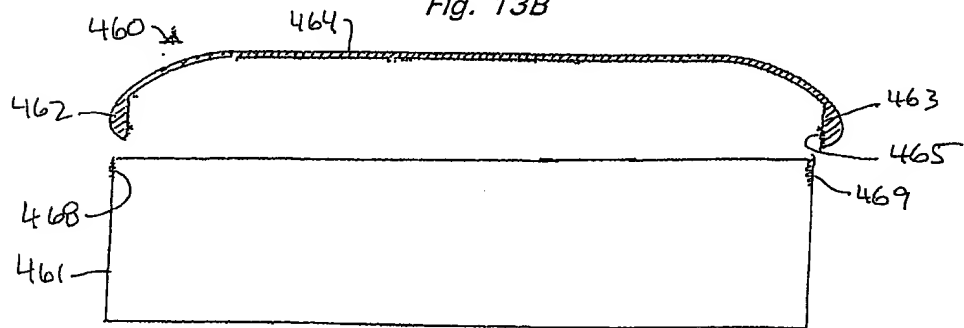


Fig. 20

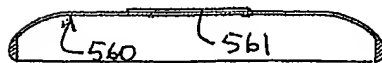
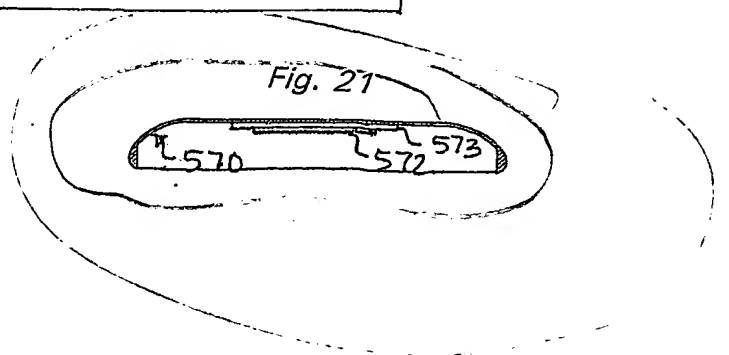


Fig. 21



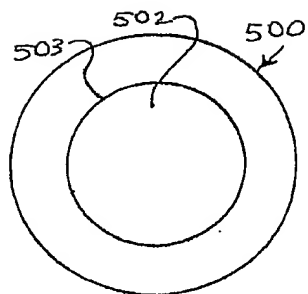
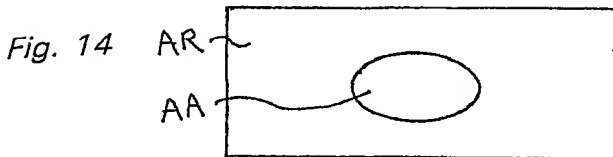


Fig. 15

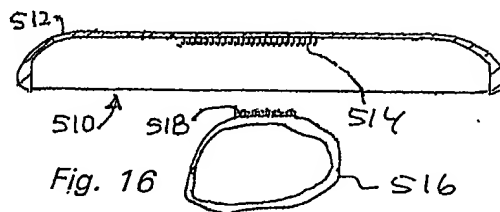


Fig. 16

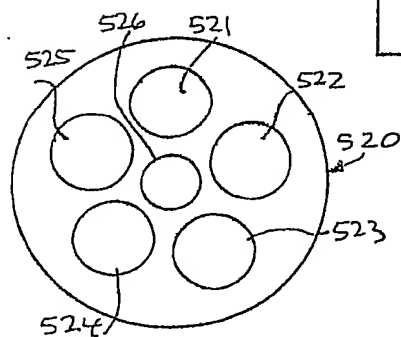
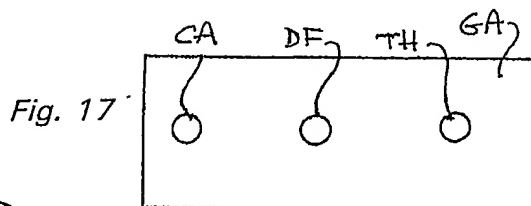


Fig. 18

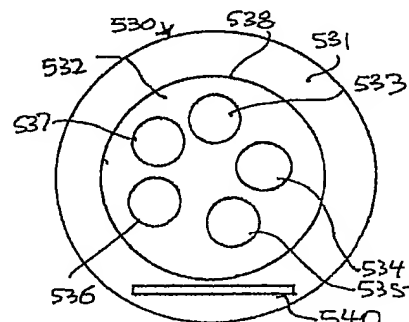
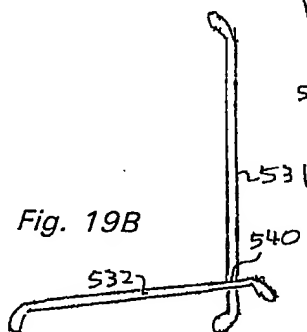


Fig. 19A





## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/18639

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A63B 65/10, 67/06; A63B 71/00

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 473/570, 588, 589; 273/336, 358, 359, 362, 412, 126R; 446/45-48, 236, 258; D21/443

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,112,612 A (WOODS) 12 September 1978, See the entire document.	1-20
Y	US 4,132,029 A (THOMPSON et al) 02 January 1979, See the entire document.	1-20
X	US 4,176,843 A (DEWITT, Jr) 04 December 1979, See the entire document.	1-20
Y	US 4,301,616 A (GUDGEL) 24 November 1981, See the entire document.	1-20
X	US 4,752,267 A (LAYMAN) 21 June 1988, See the entire document.	1-20
A	US 4,335,536 A (MAGID et al) 22 June 1982, See the entire document.	1-20

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"G" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

14 JULY 2001

Date of mailing of the international search report

03 AUG 2001


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 Paralegal Specialist  
 Technology Center 3700

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US01/18639

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,802,875 A (CUNNINGHAM) 07 February 1989, See the entire document.	1-20
Y	US 4,820,230 A (RICHARDS) 11 April 1989, See the entire document.	1-9
Y	US 5,020,808 A (RICHARDS) 04 June 1991, See the entire document.	1-20
A	US 5,066,258 A (TOMBERLIN) 19 November 1991, See the entire document.	1-20
Y	US 5,067,923 A (DE BOURBON) 26 November 1991, See the entire document.	1-20
Y	US 5,358,440 A (ZHENG) 25 October 1994, See the entire document.	1-20
Y	US 4,971,334 A (STWEART) 20 November 1990, See the entire document.	21
Y	US 4,986,548 A (CONNER) 22 January 1991, See the entire document.	21
Y	US 5,221,092 A (SIMONS, Jr et al) 22 June 1993, See the entire document.	21

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US01/18639

## A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

473/570, 588, 589; 273/336, 358, 359, 362, 412, 126R; 446/45-48, 236, 258; D21/443